

WHAT IS CLAIMED IS:

1. A coronary sinus accessing system, comprising:

a. an elongated tubular support member configured for intravascular advancement to a patient's right atrium including

5 an elongated shaft which has proximal and distal shaft sections and a first lumen extending within the proximal and distal shaft sections, and

a distal tip which has an opening in fluid communication with the first lumen in the elongated shaft and which is oriented at an angle with respect to a longitudinal axis of the shaft;

10 b. a guide member which has proximal and distal shaft sections, which is disposed within the first lumen of the tubular support member, which is configured for longitudinal movement through the first lumen and out the distal discharge opening and which has a distal extremity configured for entry into a patient's coronary sinus ostium; and

15 c. a stabilizing member for the tubular support member for maintaining the alignment of the tubular support member within a patient's right atrium.

2. The accessing system of claim 1 wherein the tubular support member has a second lumen extending therein.

20 3. The accessing system of claim 2 wherein the stabilizing member has an elongated core and a flexible body disposed about a distal portion of the core

and is configured to be slidably advanced through the second lumen extending within the tubular support member.

4 The accessing system of claim 3 wherein the stabilizer member has a distal section which is configured to be seated within the apex of a patient's right
5 ventricle.

5. The accessing system of claim 4 wherein the distal section of the stabilizer member has a J-shape.

6. The accessing system of claim 3 wherein the stabilizer member has a plurality of indicia on the core thereof to measure axial movement of the tubular
10 support member.

7. The accessing system of claim 2 wherein the distal shaft section of the tubular support member is provided with an electrode.

8. The accessing system of claim 1 wherein the guide member has an inner lumen extending therein.

15 9. The accessing system of claim 1 wherein the guide member has an electrode on the distal shaft section thereof.

10. The accessing system of claim 9 wherein the proximal shaft section of the guide member has a second proximal extension with an electrical connector thereof electrically connected to the electrode on the distal shaft section thereof.

11. The accessing system of claim 10 wherein the electrical connector is electrically connected to the electrode on the distal shaft section by means of a conductor.

12. The accessing system of claim 1 wherein the distal tip of the tubular support member is oriented at an angle of about 20° to about 70° with respect to a longitudinal axis of the shaft

13. The accessing system of claim 1 wherein the distal tip of the tubular support member is oriented at an angle of about 30° to about 60°.

14. A tubular support member configured for intravascular advancement through a patient's vasculature to the right atrium thereof, including

a. an elongated shaft which has proximal and distal shaft sections, a longitudinal axis and at least a first and second lumens extending through the proximal and distal shaft sections;

b. a distal tip on the distal shaft section which has a first opening in fluid communication with the first lumen in the elongated shaft and which is oriented at an angle with respect to the longitudinal axis of the shaft; and

c. a second opening in the distal shaft section which is in fluid communication with the second lumen in the elongated shaft.

15. The accessing system of claim 14 wherein the distal tip of the tubular support member is oriented at an angle of about 20° to about 70 ° with respect to a longitudinal axis of the shaft

16. The accessing system of claim 14 wherein the distal tip of the tubular support member is oriented at an angle of about 30° to about 60°.

17. A method for accessing a patient's coronary sinus comprising:

a. providing an accessing system having components as set forth in claim 1;

b. percutaneously introducing the components of the system into the patient's venous system and advancing the system components within the patient's venous system until the distal extremity of the tubular support member is disposed and stabilized within the patient's right atrium; and

c. extending the guide member out of the opening in the distal tip of the tubular support member until the distal end of the guide member enters the patient's coronary sinus ostium;

18. A method of treating a patient's heart, comprising:

a. providing a coronary accessing system having the components set forth in claim 1;

b. introducing the components of the accessing system into the patient's venous system and advancing the system components within the patient's venous system until the distal extremity of the tubular support member is disposed and stabilized within the patient's right atrium;

c. extending the guide member out of the opening in the distal tip of the tubular support member until the distal end of the guide member enters the patient's coronary sinus ostium; and

d. advancing an elongated intravascular device through or over the guide member, into the patient's coronary sinus.

19. A coronary sinus accessing system, comprising:

5 a. a tubular support means configured for intravascular advancement to a patient's right atrium including

an elongated shaft which has proximal and distal shaft sections, a longitudinal axis and a first lumen extending within the proximal and distal shaft sections;

10 a distal tip which has an opening in fluid communication with the first lumen in the elongated shaft and which is oriented at an angle with respect to the longitudinal axis of the shaft and

15 b. a guide means which is slidably disposed within the first lumen of the tubular support means, which is configured for longitudinal movement through the first lumen and out the distal discharge opening and which has a distal extremity configured for entry into a patient's coronary sinus ostium and a delivery therein of a therapeutic or diagnostic device; and

c. a stabilizing means for maintaining the alignment of the tubular support means within a patient's right atrium.